# 3.2-800 Quarry and Mining Operations Land Use District

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# 3.2-805 Establishment of the Quarry and Mine Operations (QMO) District

- **A.** The QMO District is established to:
  - 1. Recognize that minerals and materials within the Springfield Urban Growth Boundary are a non-renewable resource, and that extraction and processing are beneficial to the local economy.
  - **2.** Protect major deposits of minerals, rock and related material resources with appropriate zoning.
  - 3. Institute procedures for the protection of public health and safety on and adjacent to land where quarry and mining blasting operations are occurring.
  - 4. Institute standards to be used in reviewing referrals from State and Federal agencies of Operation and Reclamation Plans, pollution control and similar permits.
  - **5.** Provide for cooperation between private and governmental entities in carrying out the purposes of this Section.
- **B.** The QMO District is applied to areas with a Sand and Gravel designation on the Metro Plan Diagram.

#### 3.2-810 Schedule of Use Categories

The following buildings and uses are permitted in this district as indicated, subject to the provisions, additional restrictions and exceptions specified in this Code and the provisions of the Reclamation Permit required by ORS 517.790, issued by the Oregon Department of Geology and Mineral Industries.

"P" = PERMITTED USE subject to the standards of this Code.

"S" = SPECIAL DEVELOPMENT STANDARDS subject to special locational and siting standards to be met prior to being deemed a permitted use.

"D" = DISCRETIONARY USE subject to review and analysis under Type 3 procedure (SDC 5.9-100) at the Planning Commission or Hearings Officer level.

### SITE PLAN REVIEW SHALL BE REQUIRED, unless exempted elsewhere in this Code.

Use Categories/Uses	QMO District
Extracting and storing of rocks and minerals, including equipment and	Р
materials necessary to carry out these functions	
Plants for the processing of minerals from quarry and mining extraction	Р
operations	
Sale of products generated from the quarrying and mining operation	Р
Activities permitted as part of the reclamation process	Р
Structures and buildings used in conjunction with the extracting and storing of	Р
mineral	
Parking facilities for employees and customers	Р
Tree felling necessary to prepare a site for mining or as a quarry activity as	Р
specified in SDC 5.19-100	
Low impact public facilities	Р
High impact public facilities	Р
Certain wireless telecommunications systems facilities (SDC 4.3-145)	Р
Night watchperson's quarters	Р
Linear park	Р

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#### 3.2-815 Review

- **A.** To establish a new quarry or mining operation within the Springfield Urban Growth Boundary, the following are required:
  - **1.** A Metro Plan amendment (Type 4 review).
  - 2. A concurrent zone change to QMO District (Type 4 review). The ordinance rezoning properties to the QMO District shall specify the precise location of any scenic areas listed on Metro Plan inventories that require protection under Subsection A.1., above.

- 3. Site Plan Review (Type 2 review). For the purpose of this Section, all permitted uses are considered industrial uses requiring Site Plan Review as specified in SDC5.17-100.
- **4.** A copy of the application for a Reclamation Permit as specified in SDC 3.2-820 shall be referred to the Director for review.
- **B.** To expand an existing quarry or mining operation, which is zoned QMO District, within the Springfield Urban Growth Boundary, the following are required:
  - 1. Discretionary Use (Type 3 review) shall be used to determine whether, where and under what conditions quarry and mining operations may occur in identified scenic areas within the QMO District.
  - 2. Site Plan Review (Type 2 review). For the purpose of this Section, all permitted uses are considered industrial uses requiring Site Plan Review as specified in SDC 5.17-100.
  - 3. A copy of the application for a Reclamation Permit as specified in SDC 3.2-820 shall be referred to the Director for review.

## 3.2-820 Permits for Quarry and Mine Extraction

No quarry or mining extraction or related operations may be initiated in the QMO District until a Reclamation Permit required by ORS 517.790 has been issued by the Oregon Department of Geology and Mineral Industries. Standards established under ORS 517 for quarry and mine extraction are considered minimum standards to be observed during extraction, processing and reclamation activities to assure that the operation takes into consideration the health, safety and welfare of people on and off the site who may be affected by the operation, and that the site shall be clean, orderly and left in a condition conducive to appropriate uses after extraction has been completed and that conflicts between other identified environmental resources are resolved consistent with the Policies of the Metro Plan.

#### 3.2-825 Operation and Reclamation Standards

- **A.** Information submitted as part of the Reclamation Permit process required in SDC 3.2-820 shall be evaluated against the following standards by the Director:
  - 1. In lieu of uniform setbacks for all quarry and mine extraction operations:
    - **a.** Setbacks from adjacent properties shall be sufficient to protect the normal activities of residences, businesses, industries recreation and other uses permitted under this Code.

- b. Setbacks from adjacent properties shall be a distance sufficient to minimize hazards to persons and property resulting from blasting, slides, slippage, subsidence, ground and surface water contamination and depletion and other hazards.
- 2. Any night lighting shall be arranged and controlled so as not to illuminate adjacent properties and uses permitted under this Code.
- The hours of operation shall be determined by what is necessary to protect the surrounding activities from disturbance caused by quarry and mining extraction operations.
- **4.** Fencing around the quarry and mining operation shall be required when it has been determined that the location, type and nature of the operation poses hazards to the safety of the surrounding residents and public and private property.
- When expansion of an existing operation is in close proximity to existing or planned uses potentially incompatible with QMO District uses, or where there is a conflict with any other resource that appears on an adopted environmental resource inventory, the application of the QMO District or the expansion of an existing operation may be limited to a specific portion of a property in order to encourage the compatibility and proper management of land uses.
- 6. All mining spoils shall be disposed of so they will not create a geological hazard or contribute to water pollution through leaking, leaching or erosion. Management of mining spoils shall be in a manner which is consistent with the standards of the local soil and water conservation district.
- **7.** Overburden and topsoil not removed from the property shall be placed and stabilized in a manner that does not create safety hazards or nuisances for adjacent properties.
- 8. Screening shall be required where it is determined necessary to minimize the visual impact of the quarry and mining extraction operation on neighboring properties, residences, commercial, industrial, park and recreational or other land use activities.
- **9.** Wherever possible, existing trees, shrubs, and other types of vegetation along street frontages shall be preserved, maintained and supplemented.

- 10. When the quarry and mine operation includes the use of open shafts or tunnels, the entrance to all shafts and tunnels shall be covered, closed off or otherwise protected against entry during non-working hours.
- **B.** Reclamation of land subjected to quarry and mining extraction operations is an ongoing process, which shall occur as phases of the quarry and mine extraction operation are completed. The application for the Reclamation Permit required in SDC 3.2-820 shall comply with the following standards:
  - **1.** General Provisions and Timing.
    - **a.** A schedule for reclamation shall define areas covered by each phase and the probable timing.
    - **b.** Reclamation operations shall be consistent with the Metro Plan.
    - c. All structures and buildings used in conjunction with the extraction and storing of minerals shall be removed following completion of the operation, unless the structures or buildings are suitable for other permitted uses or as determined by the Director.
  - **2.** Topsoil and Fill Material.
    - a. Material used in refilling holes, pits and excavations shall be of a quality that will not decompose, contaminate or pollute the groundwater or surface, or cause subsidence either during the operation of the excavation or upon termination of the quarry and mine operations.
    - **b.** All graded or back-filled areas, or banks shall be covered with topsoil to a depth sufficient to support vegetation and/or other approved cover adequate to control soil erosion.
  - **3.** Slopes and Grading. Excavations made to any setback lines shall meet the following requirements:
    - **a.** Where excavations have not been made to water-producing depth;
      - i. Slopes that are steeper than that of the immediately surrounding area shall be acceptable if they are designed by an engineer with expertise in the field of rock and soils mechanics and acceptable to the State Department of Geology and Mineral Industries. If the slopes are steeper than 1 vertical to 1-1/2 horizontal, provisions shall be made so that people and wildlife can find safe egress from the excavation area.

- ii. The bottom of any excavation shall be graded so that drainage flows into one low area of the excavation. If drainage from this site is practical, the site shall be graded to discharge water to existing natural channels.
- **b.** Where excavations have been made to water-bearing strata;
  - i. Excavations made to a water-producing depth creating lakes and ponds shall be deep enough to prevent stagnation and development of an insect-breeding area or back-filled with material that will not impair the groundwater quality.
  - ii. All banks shall be sloped at a ratio no steeper than 1 vertical to 2 horizontal to a water depth of 3 feet, measured from the low water mark, and to 3 feet above the high water mark.
  - **iii.** All grading shall be done to establish safe access to and egress from water for persons and wildlife.
- c. Unless specified above, upon completion of operations, the condition of the land shall allow sufficient drainage to prevent water pockets or significant erosion. Natural drainage shall be maintained to prevent harmful effects on neighboring property. The rate of drainage shall not be increased over what it would have been if the site had remained in its original use.
- **d.** All quarry faces, which exceed 45 degrees, shall be benched. The bench face ratio shall not exceed 1-1/2 vertical to 1 horizontal. Benches shall be at least 10 feet wide.

### 3.2-830 Blasting Standards

Operators using explosives for quarry and mine extraction shall follow explosive regulations and use engineering standards acceptable to the Director, based on atmospheric conditions and physical conditions of the site to prevent injury to persons and damage to public and private property.

A. When blasting is proposed within 500 feet of an occupied building, the operator, or an authorized agent, shall notify all occupants that a blast is to be initiated. Notice shall be given not more than 6 hours nor less than 30 minutes prior to detonation and shall include the approximate time of the blast.

- **B.** Each operator shall maintain a record of each blast for at least 2 years. These records shall be available upon request to the City, the State Department of Geology and Mineral Industries and other governmental agencies with appropriate jurisdiction. The records shall show the following for each blast:
  - 1. Name of quarry or mine.
  - 2. Date, time and location of blast.
  - **3.** Description of type of explosives and accessories used.
  - **4.** Time interval of delay in milliseconds.
  - 5. Number of different delays.
  - **6.** Number of holes per delay.
  - 7. Nominal explosive weight per hole.
  - **8.** Total explosive weight per delay.
  - **9.** Total weight of explosives per blast.
  - **10.** Blast hole diameter, depth, spacing and stemming height.